This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- (Currently Amended) Nanoparticulate UV protectant which has a silicon dioxide coating, characterised in that it which is obtainable by hydrothermal treatment of a nanoparticulate metal oxide, wherein the hydrothermal treatment is carried out in a closed container at a temperature of 140 to 360°C, and subsequent application of a silicon dioxide coating.
- 2. (Currently Amended) Nanoparticulate UV protectant according to Claim 1, wherein characterised in that the metal oxide is essentially titanium dioxide, which may optionally be doped with iron.
- 3. (Currently Amended) Nanoparticulate UV protectant according to Claim 1, wherein characterised in that the crystallite size of the nanoparticulate metal oxide in the nanoparticulate UV protectant have a crystallite size of 5 nm to 100 nm, determined by the Scherrer method, is in the range from 5 nm to 100 nm, preferably in the range from 8 to 50 nm and particularly preferably below 25 nm, and the dimensions of the nanoparticulate metal oxide, which can be determined in a transmission electron microscope, are at a length of 5 to 150 nm and a width of 5 to 60 nm, preferably at a length in the range from 20 to 60 nm and a width in the range from 8 to 30 nm.
- 4. (Currently Amended) Nanoparticulate UV protectant according to Claim 1, wherein characterised in that the silicon dioxide coating is, based on the nanoparticulate UV protectant, 5 to 50% by weight, preferably 8 to 30% by weight and particularly preferably 12 to 20% by weight.
- 5. (Currently Amended) Nanoparticulate UV protectant according to Claim 1, wherein characterised in that the nanoparticulate UV protectant has a particle size determined by the Scherrer method of in the range from 5 nm to 100 nm, preferably in the range from 8 to 50 nm and particularly preferably below 25 nm, and the dimensions of the nanoparticulate UV protectant, which can be determined in a transmission electron

- 2 - DOCKET NO.: MERCK-3116

microscope, are at a length of 5 to 160 nm and a width of 10 to 70 nm, preferably at a length in the range from 30 to 70 nm and a width in the range from 18 to 40 nm.

- 6. (Withdrawn and Currently Amended) Process for the preparation of a nanoparticulate UV protectant according to claim 1, comprising characterised in that a) a nanoparticulate metal oxide is subjected to hydrothermal treatment, wherein the hydrothermal treatment is carried out in a closed container at a temperature of 140 to 360°C, and b) a silicon dioxide coating is subsequently applied.
- 7. (Withdrawn and Currently Amended) Process according to Claim 6, wherein characterised in that a nanoparticulate titanium dioxide is subjected to hydrothermal treatment in step a).
- 8. (Withdrawn and Currently Amended) Process according to Claim <u>6</u>, wherein <u>1</u>, characterised in that step a) is carried out in a sealed container at <u>a temperature of temperatures</u> in the range from 40 to 360°C, preferably in the range from 80 to 220°C and particularly preferably in the range from 140 to 200°C.
- 9. (Withdrawn and Currently Amended) Process according to Claim 6, wherein 1, characterised in that step b) is carried out as a sol-gel process, in which a water-glass solution is optionally preferably added to a suspension of the metal oxide.
- 10. (Withdrawn and Currently Amended) Process according to Claim 6, wherein 1, characterised in that step b) is carried out at a pH kept constant in the range from pH = 2 to pH = 11, preferably in the range from pH = 5 to pH = 8, particularly preferably in the range from pH = 6 to pH = 7.
- 11. (Withdrawn and Currently Amended) Process according to Claim 6, wherein characterised in that step b) is carried out without pH regulation after prior pH adjustment of the suspension of the metal oxide to a value of pH = 7 to pH = 11, and the pH is subsequently lowered to a pH = 5 to pH = 8, preferably to a value of pH = 6 to pH = 7.

- 3 - DOCKET NO.: MERCK-3116

- 12. (Withdrawn and Currently Amended) Process according to Claim 1, wherein characterised in that step b) is carried out at elevated temperature, preferably at a temperature of in the range from 50°C to 100°C.
- 13. (Currently Amended) Composition having light-protection properties comprising at least one nanoparticulate UV protectant according to Claim 1 or a nanoparticulate metal oxide prepared by a corresponding process and one or more additives.
- 14. (Currently Amended) Composition having light-protection properties according to Claim 13, characterised in that it is a composition which can be applied topically, preferably a cosmetic or dermatological formulation.
- 15. (Currently Amended) Composition having light-protection properties according to Claim 13, comprising one or more of a fibre composition, a textile product, a coating on fibres in a fibre composition or on a textile product, paint composition, coating system, film or packaging material for protection of a food product, a plant or an industrial product characterised in that it is a composition selected from the group consisting of fibres, textiles, including coatings thereof, paints, coating systems, films and packaging for the protection of foods, plants or industrial products.
- 16. (Currently Amended) Composition having light-protection properties according to Claim 1, comprising characterised in that the composition comprises at least one organic UV filter, preferably a dibenzoylmethane derivative, in particular methoxy-tert-butyldibenzoylmethane, and/or a benzophenone derivative, such as 2-hydroxy-4-methoxybenzophenone.
- 17. (Currently Amended) Composition having light-protection properties according to Claim 1, comprising characterised in that the composition comprises at least one self-tanning agent, preferably dihydroxyacetone or a dihydroxyacetone derivative.
- 18. (Currently Amended) Composition having light-protection properties according to Claim 1, comprising characterised in that the composition comprises at least one photostabilizer photostabiliser, preferably conforming to the of formula III

-4-

DOCKET NO.: MERCK-3116

$$R^{5}$$
HO
 $COXR^{2}$
III,

where

 R^1 is selected from -C(O)CH₃, -CO₂R³, -C(O)NH₂ and -C(O)N(R⁴)₂;

X is O or NH;

R² stands for a linear or branched C₁₋₃₀-alkyl radical;

R³ stands for a linear or branched C₁₋₂₀-alkyl radical,

all R⁴, independently of one another, stand for H or linear or branched C₁₋₈-alkyl radicals;

 R^5 stands for H, a linear or branched C_{1-8} -alkyl radical or a linear or branched -O- C_{1-8} -alkyl radical; and

R⁶ stands for a C₁₋₈-alkyl radical,

where the photostabiliser is particularly preferably bis(2 ethylhexyl) 2 (4 hydroxy-3,5-dimethoxybenzylidene)malonate.

- 19. (Currently Amended) Composition having light-protection properties according to Claim 1, comprising characterised in that the composition comprises one or more further UV filters, which are preferably selected from the group consisting of 3-(4'-methylbenzylidene)-dl-camphor, octyl methoxycinnamate, 3,3,5-trimethylcyclohexyl-salicylate, 2-ethylhexyl 4-(dimethylamino)benzoate, 2-ethylhexyl 2-cyano-3,3-diphenyl-acrylate, or 2-phenylbenzimidazole-5-sulfonic acid or a and the potassium, sodium or and triethanolamine salt salts thereof.
- 20. (Currently Amended) Composition having light-protection properties according to Claim 1, comprising which is suitable for the protection of body cells against oxidative stress, in particular for reducing skin ageing, characterised in that it preferably comprises one or more antioxidants.
- 21. (Currently Amended) Composition having light-protection properties according to

- 5 - DOCKET NO.: MERCK-3116

- Claim 1, which characterised in that it is an emulsifier-free emulsion, preferably a Pickering-emulsion.
- 22. (Withdrawn and Currently Amended) Process for the preparation of a composition according to claim 13, comprising mixing together said at least one nanoparticulate UV protectant with characterised in that a nanoparticulate UV protectant according to Claim 1 or a nanoparticulate UV protectant prepared according to a corresponding process is mixed with a cosmetically or dermatologically suitable carrier and optionally further ingredients.
- 23. (Cancelled)
- 24. (Cancelled)
- 25. (Withdrawn and Currently Amended) Use of a nanoparticulate UV protectant according to Claim 1 or of a nanoparticulate UV protectant prepared according to a corresponding process A method for the stabilization stabilisation of a UV filter, comprising adding to said UV filter a nanoparticulate UV protectant according to Claim 1 filters, in particular dibenzoylmethane and dibenzoylmethane derivatives or benzophenone and benzophenone derivatives.
- 26. (Withdrawn and Currently Amended) Use of a nanoparticulate UV protectant according to Claim 1 or of a nanoparticulate UV protectant prepared according to a corresponding process for the stabilisation of A method for the stabilization of a self-tanning agent, comprising adding to said self-tanning agent a nanoparticulate UV protectant according to Claim 1 agents, in particular dihydroxyacetone and dihydroxyacetone derivatives.
- 27. (Withdrawn and Currently Amended) A paint composition, coating system, film, packaging, fibre, textile, rubber, silicone rubber moulding, a tire or an insulator, comprising a nanoparticulate UV protectant according to Claim 1 Use of a nanoparticulate UV protectant according to Claim 1 or of a nanoparticulate UV protectant prepared according to a corresponding process for incorporation into paints,

DOCKET NO.: MERCK-3116

- coating systems, films, packaging, fibres, textiles and rubber or silicone rubber mouldings, such as tyres or insulators.
- 28. (New) Nanoparticulate UV protectant according to Claim 1, wherein the metal oxide is titanium dioxide doped with iron.
- 29. (New) Nanoparticulate UV protectant according to Claim 1, wherein the hydrothermal treatment is carried out in a closed container at a temperature of 150 to 360°C.

DOCKET NO.: MERCK-3116

-7-